

NTRD Program Disclaimers

1. Disclaimer of Endorsement:

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**Texas Commission on Environmental Quality
New Technology Research & Development (NTRD) Program
Project Status (Monthly Report)**

Contract Number: 582-5-65591-0010

Grantee: Eaton Corporation

Date Submitted: November 10, 2004

Report for the **Monthly** period:

Starting Date Sept 15, 2004 Ending Date Oct 31, 2004

Section I. Accomplishments *(Please Provide a bulleted list of project accomplishments as well as a description of their importance to the project.)*

1. Accomplishment: The transfer case specification has been refined. Discussions with several potential suppliers has begun to determine if their existing products or small variations of existing products will be suitable for use in the HLA system.
Importance: Very important, critical component.
2. Accomplishment: Accumulator specifications are being reviewed by a supplier.
Importance: Important, critical component.
3. Accomplishment: Several layout configurations have been analyzed for vehicle installation. A feasible pump/motor location has been found.
Importance: Necessary input for HLA hardware design decisions.
4. Accomplishment: The Pump/Motor housing design is progressing.
Importance: Necessary to decrease weight/cost and properly fit in vehicle.
5. Accomplishment: The product specification is about 20% complete.
Importance: The product specification contains useful input for hardware & system design decisions and documentation.
6. Accomplishment: Reliability and testing requirements for a production product were studied in preparation for writing a test plan.
Importance: Useful in product design and test program development for product to be acceptable for production.
7. Accomplishment: A function model of the HLA system was partially completed.
Importance: This analysis model is useful for solving design problems
8. Accomplishment: Meetings were held to decide on a course for vehicle procurement. A decision was made to utilize a new vehicle for this project.
Importance: This decision allows progress on vehicle layout design.
9. Accomplishment: A study of the chassis refuse market was started to more fully understand the diversity of product offerings from chassis makers.
Importance: This information will help insure maximum potential use of the HLA system product.

Implémentation Grants Section

Texas Commission on Environmental Quality

Indicate which part of the Scope of Work, the above accomplishments are related to:

1. SOW 2.1.4.1.2
2. SOW 2.1.4.1.1
3. SOW 2.1.3.1
4. SOW 2.1.4.1
5. SOW 2.1.3.1
6. SOW 2.1.4.1
7. SOW 2.1.4
8. SOW 2.2.3
9. SOW 2.1.1

Section II: Problems/Solutions

<p>Problem(s) Identified</p> <p><i>(Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)</i></p>	<p>Transfer case design/selection is proceeding slower than planned. This could cause a delay in prototype procurement for test vehicle.</p>
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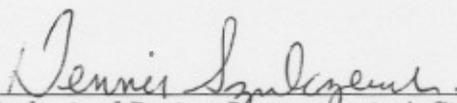
<p>Proposed Solution(s)</p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<ul style="list-style-type: none">• Design in-house• Further engage current suppliers• Investigate different suppliers
<p>Action(s) Conducted and Results</p> <p><i>(Please describe the action(s) taken to resolve the problem(s) and its effect)</i></p>	<p>An acceleration in transfer case procurement activities is already underway.</p>

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Section III. Goals and Issues for Succeeding Period: *(Please provide a brief description of the goal(s) you hope to realize in the coming period and identify any notable challenges that can be foreseen)*

GOALS:

- Progress on design of pump/motor housing and end cover.
- Finalize placement of accumulators on vehicle.
- Make progress on durability test planning.
- Make progress on transfer case procurement direction.



Authorized Project Representative's Signature

Date: 11/9/09

NOTE: *Please attach any additional information that you feel should be a part of your report or that may be required to meet the deliverables requirement for tasks completed during this reporting period.*